CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 85-28

NPDES NO. CA0005550

WASTE DISCHARGE REQUIREMENTS FOR:

EXXON CORPORATION
BENICIA REFINERY
SOLANO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereafter called the Board) finds that:

1. Exxon Corporation, Benicia Refinery (hereafter called the discharger) submitted a revised NPDES Permit Application dated April 27, 1981 and amended it by letters dated May 2, 1983, September 21, 1984, and January 11, 1995 for reissuance of NPDES Permit No. CA0005550.

2. The discharge of wastewater from the facilities is currently governed by Waste Discharge Requirements, Board Order No. 79-92.

3. The discharger operates a petroleum refinery with a crude-run throughput of 115,000 barrels per day. It manufactures hydrocarbon products, by-products, and intermediates and is classified as a cracking refinery as defined by the U.S. Environmental Protection Agency in 40 CFR 419.20. Treated process wastewater, stormwater runoff, and other wastes as described below are discharged to Suisun Bay, a water of the United States.

4. The reports of waste discharge and recent self-monitoring reports describe the discharges as follows:

   a. Waste 001 consists of an average of 2.3 million gallons per day (mgd) of treated process wastewater, cooling tower blowdown, boiler blowdown, ballast water, sour water stripping and stormwater. The treated wastewater is discharged into Suisun Bay at a depth of 15 feet about 1500 feet offshore, west of the Suisun Reserve Fleet Anchorage, via a 12-inch diameter outfall with diffuser ports which provide at least 10:1 dilution. Waste 001 may be discharged on an emergency basis through an 8-inch outlet to Sulfur Springs Creek. The discharge is permitted only to prevent severe damage to treatment facilities.

   b. Waste 002 is stormwater runoff from refinery property which is discharged along the western boundary of the discharger's wastewater treatment facility, via a ditch and several pipes tributary to Sulfur Springs Creek. The creek enters Suisun Bay via a tide gate near the discharger's wastewater treatment plant.

   c. Waste 003 is stormwater runoff from refinery property which is discharged near the water service entrance box at the north end of Avenue "A" in the refinery, in the northeast corner of the processing

area, via a culvert that discharges into a ditch tributary to Sulfur Springs Creek and thence Suisun Bay as described above.

d. Waste 005 is stormwater runoff from refinery property which is discharged near the discharger's Gate No. 4, on the south side of the processing area, via a culvert that discharges into a ditch tributary to Sulfur Springs Creek and thence Suisun Bay as described above.

e. Waste 006 is stormwater runoff from refinery property which is discharged near the northern corner of the discharger's crude oil tankage site, via a ditch that discharges into Sulfur Springs Creek and thence Suisun Bay as described above.

5. The Board adopted a revised Water Quality Control Plan, San Francisco Bay Basin (Basin Plan) on July 21, 1982, and the State Water Resources Control Board approved it on October 16, 1982. The provisions of this permit are consistent with the objectives of the Basin Plan.

6. The beneficial uses of Suisun Bay are:

a. Water contact recreation
b. Non-contact water recreation
c. Navigation
d. Open commercial and sport fishing
e. Wildlife habitat
f. Estuarine habitat
g. Fish spawning and migration
h. Industrial uses
i. Preservation of rare and endangered species
j. Shellfishing

7. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

8. Effluent limitation and toxic effluent standards established pursuant to Sections 208(b), 301, 304, and 307 of the Federal Water Pollution Control Act and amendments thereto are applicable to the discharge.

9. Effluent limitation guidelines requiring the application of best available technology economically achievable (BAT) have been promulgated by the U.S. Environmental Protection Agency for the Petroleum Refining Point Source Category 40 CFR Part 419 on October 18, 1982. Effluent limitations of this Order are based on these guidelines, the Basin Plan, State Plans and Policies, current plant performance, and best engineering judgement. The limitations are considered to be those attainable by BAT in the judgement of the Board.

10. Under 40 CFR 122.44, "Establishing Limitations, Standards, and Other Permit Conditions," NPDES permits should also include toxic pollutant limitations if the discharger uses or manufactures a toxic pollutant as an intermediate or final product or byproduct. This permit may be

modified prior to the expiration date to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as a part of this Order.

11. This Order contains effluent limits based on recent production rates at this facility. The Board is aware that production can vary and commits to expediting reissuance of a new permit upon receipt of an application with new production data.

12. The Board has notified the discharger and interested agencies and persons of its intent to reissue waste discharge requirements for the discharges and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

13. The Basin Plan includes the following prohibition:

"...It shall be prohibited to discharge:

All conservative toxic and deleterious substances, above those levels which can be achieved by a program acceptable to the Board, to waters of the Basin."

14. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Water Pollution Control Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. The discharge of Waste 001 containing constituents in excess of the following limits is prohibited:

| Constituent | Units | 30-day Average | Maximum Daily |
|---|---|---|---|
| BOD (5-day @ 20°C) | lbs/day | 1180 | 2130 |
| | kg/day | 536 | 970 |
| TSS | lbs/day | 953 | 1470 |
| | kg/day | 433 | 670 |
| COD | lbs/day | 8240 | 15900 |
| | kg/day | 3750 | 7220 |
| Oil and Grease | lbs/day | 341 | 636 |
| | kg/day | 155 | 289 |
| | mg/l | 10 | 20 |
| Phenolic Compounds | lbs/day | 5.81 | 15.9 |
| | kg/day | 2.64 | 7.22 |
| Ammonia as N | lbs/day | 642 | 1420 |
| | kg/day | 292 | 646 |
| Sulfide | lbs/day | 6.20 | 13.6 |
| | kg/day | 2.82 | 6.19 |
| Total Chromium | lbs/day | 6.82 | 19.6 |
| | kg/day | 3.10 | 8.91 |
| Hexavalent Chromium | lbs/day | 0.56 | 1.25 |
| | kg/day | 0.25 | 0.57 |
| Total Zinc | lbs/day | 6.00 | 10.0 |
| | kg/day | 2.72 | 4.54 |
| Settleable Solids | ml/l-hr | 0.1 | 0.2 |
| Soluble BOD (5-day @ 20°C) | mg/l | * | * |

* The Board will consider inclusion of limitations for Soluble BOD (defined as non-filterable) based on 18 months of performance data to be obtained as a part of the attached self-monitoring program.

2. In addition to the 30-day average and daily maximum pollutant weight allowances shown in A.1, allocations for pollutants attributable to stormwater runoff and ballast water discharged as a part of Waste 001 are permitted in accordance with the following schedules:

STORMWATER RUNOFF

| Constituent | Units | 30-Day Average | Maximum Daily |
|---|---|---|---|
| BOD (5-day @ 20°C) | mg/l | 26 | 48 |
| TSS | mg/l | 21 | 33 |
| COD | mg/l | 180 | 360 |
| Oil and Grease | mg/l | 8 | 15 |
| Phenolic Compounds | mg/l | 0.17 | 0.35 |
| Total Chromium | mg/l | 0.21 | 0.60 |
| Hexavalent Chromium | mg/l | 0.028 | 0.062 |

BALLAST WATER

| Constituent | Units | 30-Day Average | Maximum Daily |
|---|---|---|---|
| BOD (5-day @ 20°C) | mg/l | 26 | 48 |
| TSS | mg/l | 21 | 33 |
| COD | mg/l | 240 | 470 |
| Oil and Grease | mg/l | 8 | 15 |
| pH | Within the range of 6.0 to 9.0 | | |

The total effluent limitation for the discharge is the sum of the stormwater runoff allocation, the ballast water allocation and the mass limits contained in A.1. The total effluent limitation (both maximum and average) is to be computed by the discharger on a monthly basis as shown in Part B of the Monitoring Program.

3. Waste 001 shall not have a pH less than 6.0 nor greater than 9.0.

4. In representative samples of the effluent, the discharge of Waste 001 shall meet the following limit of quality:

TOXICITY:

The survival of threespine stickleback (Gasterosteus aculeatus) test fishes in 96 hour bioassays shall achieve a 90 percentile

value of not less than 50 percent survival based on any ten consecutive samples.

5. The discharge of Wastes 002, 003, 005, and 006 containing constituents in excess of the following limits is prohibited:

| Constituent | Units | Maximum Daily |
|---|---|---|
| Oil and Grease | mg/l | 15 |
| TOC | mg/l | 110 |
| pH | pH units | 6.5-8.5 |
| Visible oil | observation | none |
| Visible color | observation | none |

B. Receiving Water Limitations

1. The discharge of wastes shall not cause the following conditions to exist in waters of the State at any place at levels that cause nuisance or adversely affect beneficial uses:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam;

   b. Bottom deposits or aquatic growths;

   c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

   d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:

   a. Dissolved oxygen: 7.0 mg/l minimum. The median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.

   b. Dissolved sulfide: 0.1 mg/l maximum.

c. pH: The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units.

d. Un-ionized ammonia (as N): 0.025 mg/l Annual Median,
0.4 mg/l Maximum at any time.

3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments therto, the Board will revise and modify this Order in accordance with such more stringent standards.

C. Provisions

1. Waste 001 shall receive an initial dilution of at least 10:1.

2. Discharge of Waste 001 through the alternate discharge point in Sulfur Springs Creek shall occur only when the discharge is necessary to prevent severe damage to treatment facilities or a more adverse effect on the receiving waters. The Board shall be notified prior to each use of the alternate discharge point.

3. In the event of repeated noncompliance with Effluent Limitation A.4 - Toxicity, the discharger may be required to submit to the Board a technical report, identifying the conservative and non-conservative toxicants in the process waste effluent and the extent to which each toxicant contributes to the total toxicity.

4. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from date of hearing provided the Regional Administrator, U.S. Environmental Protection Agency, has no objections.

5. This permit shall be modified or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(c), and (d), 303, 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

(a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or,

(b) Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall

also contain any other requirements of the Act then applicable.

6. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by theBoard.

7. This permit may be modified prior to the expiration date to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as a part of this Order.

8. All applications, reports, or information submitted to the Board shall be signed and certified pursuant to Environmental Protection Agency regulations 40CFR122.41(k).

9. Pursuant to Environmental Protection Agency regulations [40CFR122.42(a)] the discharger must notify the Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin, use or manufacture a pollutant not reported in the permit application, or (2) a discharge of a toxic pollutant not limited by this permit has occurred, or will occur, in concentrations that exceed the specified limits included in 40CFR122.42(a).

10. Order Nos. 79-92 and 80-45 are hereby rescinded.

11. This Order includes all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977 except A.5, A.12, B.2, and B.5.

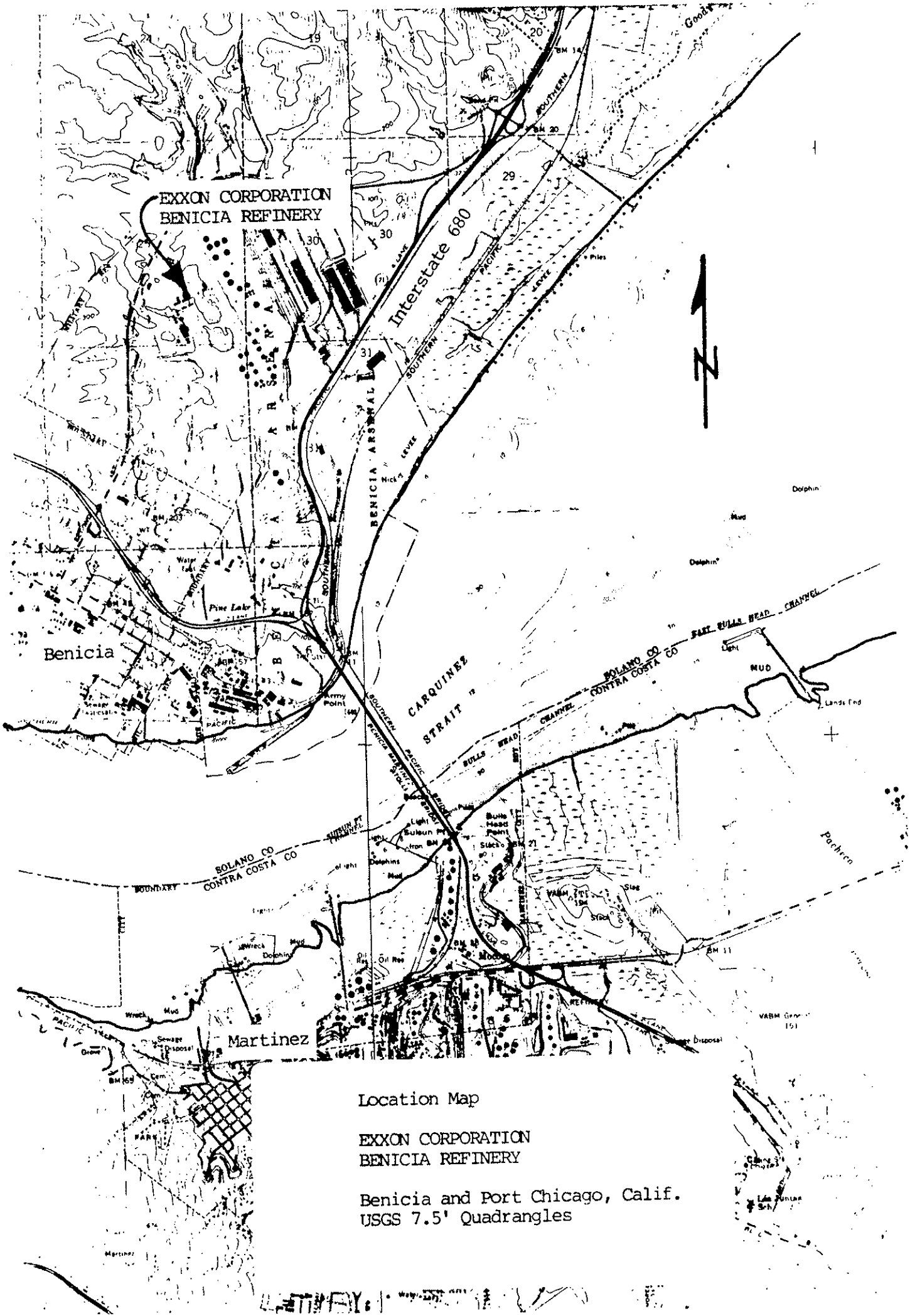
12. This Order expires on February 20, 1990, and the discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

13. The discharger shall comply with all Specifications and Provisions of this Order immediately upon adoption.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on February 20, 1985.

ROGER B. JAMES
Executive Officer

Attachments:
Location Map
Standard Provisions, Reporting
Requirements and Definitions dated April 1977
Self-Monitoring Program




Location Map

EXXON CORPORATION
BENICIA REFINERY

Benicia and Port Chicago, Calif.
USGS 7.5' Quadrangles

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

AMENDED

SELF-MONITORING PROGRAM
FOR

EXXON CORPORATION,

BENICIA REFINERY

NPDES NO. CA 0005550

ORDER NO. 85-28

CONSISTS OF

PART A, dated 1/78

AND

PART B

PART B

## I. DESCRIPTION OF SAMPLING STATIONS

### A. EFFLUENT

| Station | Description |
|---|---|
| E-001 | At any point in the outfall from the treatment facilities for Waste 001 between the point of discharge and the point at which all waste tributary to that outfall is present. |
| E-001A | At any point in the outfall from the treatment facilities for Waste 001 between the point of discharge to Sulfur Springs Creek and the point at which all waste tributary to that outfall is present. |
| E-002 a thru d | In the several ditches that drain from the discharger's Parcel No. 3, at the property line thereof. |
| E-003 | At the discharger's boundary fence and in the drainage ditch from the water service entrance box near the north end of Avenue "A" in the refinery. |
| E-005 | At the crest of the concrete flume in the drainage ditch adjacent to the boundary fence on the southern side of the refinery, approximately one thousand feet upstream of discharger's Gate No. 4. |
| E-006 | In the ditch that drains the northern part of the discharger's Parcel No. 2 at a point just below the east pipeline right-of-way. |

## II. MISCELLANEOUS REPORTING

A. The discharger shall record the rainfall on each day of the month.

B. The discharger shall determine the stormwater runoff/ ballast water allocation (daily & monthly) for its discharge using the method described in attached Form A. Form A shall be submitted with the monthly self-monitoring report. The daily maximum allocation must be computed for each day Waste 001 is monitored.

C. The discharger shall retain and submit (when required) the following information concerning the monitoring program for organic and metallic pollutants.

   a. Description of sample stations, times, and procedures.

   b. Description of sample containers, storage, and holding time prior to analysis.

   c. Quality assurance procedures together with any test results for replicate samples, sample blanks, and any quality assurance tests, and the recovery percentages for the internal and surrogate standards.

D. The discharger shall submit in the monthly self-monitoring report the metallic & organic test results together with the detection limits (including unidentified peaks). All unidentified (non-Priority Pollutants) peaks detected in the EPA 624 and 625 test methods shall be identified and semi-quantified. Hydrocarbons detected at $\leq$ 10 ug/l based on the nearest internal standard may be appropriately grouped and identified together as aliphatic hydrocarbons, aromatic hydrocarbons, and unsaturated hydrocarbons. All other hydrocarbons detected at >10 ug/l based on the nearest internal standard shall be identified and semi-quantified.

   Note that you may submit your metallic monitoring results in your regular self-monitoring reports or in a separate report within thirty days of the end of each month, as long as you indicate in your regular monthly monitoring report that the metals results will be reported in this separate report.

E. Ballast water treated and discharged as part of Waste 001 shall be metered and the volume recorded in attached Form A for each calendar day. The 30-day average shall be the sum of the daily values in a calendar month divided by the number of days in that month. Ballast-water allocations shall be calculated by multiplying the volume of ballast water, determined above by the appropriate concentration listed under Effluent Limitation A.2. in the permit.

III. SCHEDULE OF SAMPLING AND ANALYSIS

A. The schedule of sampling and analysis shall be that given in Table 1 (attached).

B. Sample collection, storage, and analyses shall be performed according to the latest 40 CFR Part 136 or other methods approved and specified by the Executive Officer of this Regional Board.

IV. MODIFICATIONS TO PART A

Exclude paragraphs C.3, C.4, C.5, D.3, and E.4.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No.73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No.85-28.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer or Regional Board.

ROGER B. JAMES
EXECUTIVE OFFICER

Effective Date January 29, 1987

Attachments:
Table 1
Form A

TABLE 1

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

| Sampling Station | E-001 and E-001A (10) | | | E-002 thru 005 | |
|---|---|---|---|---|---|
| TYPE OF SAMPLE | Cont | C-24 | G | G | |
| Flow Rate (mgd) | Cont | | | | |
| BOD, 5-day, 20°C, & COD (mg/l & kg/day) | | W | | | |
| Soluble BOD (mg/l) | | W (9) | | | |
| Settleable Matter (ml/l-hr. & cu. ft./day) | | | W | | |
| Total Suspended Matter (mg/l & kg/day) | | W | | | |
| Oil and Grease (mg/l & kg/day) | | | (1) W | (11) M | |
| Coliform (Total or Fecal) (MPN/100 ml) per req't | | | | | |
| Fish Toxicity | | (3) W | | | |
| Ammonia Nitrogen (mg/l & kg/day) | | W | | | |
| pH (units) | (2) Cont | | | (11) M | |
| Dissolved Oxygen (mg/l and % Saturation) | | | | | |
| Temperature (°C) | Cont | | | | |
| Sulfides Total (mg/l) | | | W | | |
| Arsenic (mg/l & kg/day) | | 2M | | | |
| Cadmium (mg/l & kg/day) | | 2M | | | |
| Chromium, Total (mg/l & kg/day) | | W | | | |
| Copper (mg/l & kg/day) | | W | | | |
| Cyanide (mg/l & kg/day) | | W | | | |
| Silver (mg/l & kg/day) | | 2M | | | |
| Lead (mg/l & kg/day) | | W | | | |
| ALUMINUM (mg/l & kg/day) | | M | | | |
| COBALT (mg/l & kg/day) | | M | | | |

TABLE 1 (continued)

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

| Sampling Station | E-001 and E-001A | | | (16) E-002 thru 005 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TYPE OF SAMPLE | C-24 | G | | G | | | | | | | | | |
| Mercury (mg/l & kg/day) | 2M | | | | | | | | | | | | |
| Nickel (mg/l & kg/day) | W | | | | | | | | | | | | |
| Vanadium (mg/l + kg/day) | W | | | | | | | | | | | | |
| Zinc (mg/l & kg/day) | W | | | | | | | | | | | | |
| Phenolic Compounds (mg/l & kg/day) | W | | | | | | | | | | | | |
| All Applicable Standard Observations | | | | (11) M | | | | | | | | | |
| Bottom Sediment Analyses and Observations | | | | | | | | | | | | | |
| Total Ident. Chlor. Hydrocarbons (mg/l & kg/day) | | | | | | | | | | | | | |
| Total Organic Carbon (TOC) | | | | (11) E | | | | | | | | | |
| Hexavalent Chromium | W | | | | | | | | | | | | |
| Unionized Ammonia (as N) | | | | | | | | | | | | | |
| Selenium (12) | W | | | | | | | | | | | | |
| Volatile Organics (5) | | 2Y (7) | | | | | | | | | | | |
| Acid Base/Neutral Organics (6) | | 2Y (7) | | | | | | | | | | | |
| Polynuclear Aromatic Hydrocarbons (8) | M | | | | | | | | | | | | |

## LEGEND FOR TABLE 1

### TYPES OF SAMPLES

G = grab sample
C-24 = composite sample - 24-hour
Cont = continuous sampling
O = observation

### TYPES OF STATIONS

I = intake stations
E = waste effluent stations
C = receiving water stations
B = bottom sediment stations

### FREQUENCY OF SAMPLING

E = each occurence
D = once each day
W = once each week
2/W = 2 days per week
M = once each month
2M = every 2 months
Y = once each year
2Y = twice each year
cont = continuous

## FOOTNOTES FOR TABLE 1

(1) Oil and grease sampling shall consist of 3 grab samples taken at 2 hour intervals during the sampling day, with each grab being collected in a glass container. The entire volume of each sample shall be composited prior to analysis. Each glass container used for sample collection or mixing shall be thoroughly rinsed with solvent rinsings as soon as possible after use, and the solvent rinsings shall be added to the composite wastewater sample for extraction and analysis.

(2) Daily minimum and maximum shall be reported

(3) The discharger shall determine compliance utilizing flow-through bioassays. Immediately upon the death of over half the test fish, the LC-50 of the discharge shall be determined using at least 4 dilutions in a static bioassay.

(4) Receiving water analysis for sulfides should be run when dissolved oxygen is less than 5.0 mg/l.

(5) Volatile Organic Toxic Pollutants shall be analyzed using EPA Method 624 of the July, 1982, Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057.

FOOTNOTES FOR TABLE 1 CONT.

(6) Acid and Base/Neutral Extractable Organic Toxic Pollutants shall be analyzed using EPA Method 625 of the July, 1982, Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057.

(7) Grab samples shall be collected coincident with samples collected for the analysis of the regulated parameters. In addition, the grab samples must be collected in glass containers.

(8) Polynuclear Aromatic Hydrocarbons shall be analyzed using EPA Method 610 of the July, 1982, Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater. Note that the samples must be collected in amber glass containers. These samples shall be collected coincident with samples collected for the analysis of the regulated parameters. An automatic sampler which incorporates glass sample containers and keeps the samples refrigerated at 4 C and protected from light during compositing may be used. Note that the 24-hour composite samples may consist of eight grab samples collected at three hour intervals. The analytical laboratory shall remove flow-proportioned volumes from each sample vial or container for the analysis.

(9 ) Soluble BOD is defined here as the 5-day, 20$^{o}$C BOD of filtrate that passes through a standard glass fiber filter as described in Standard Methods for the Examination of Water and Wastewater, 15th Edition, Part 209 B., APHA, AWWA, WPCF, (1980).

(10) Station E-001A shall be monitored only when there is a discharge of Waste 001 to Sulfur Springs Creek.

(11) Stormwater-runoff sampling shall consist of a single grab sample during the first hour of runoff from the first storm of each calendar month.

(12) Selenium must be analyzed only by the atomic absorption, gaseous hydride procedure (EPA Method No. 270.3/Standard Method No. 303E).

FORM A

# STORMWATER/BALLAST WATER ALLOCATION PROCEDURE

This procedure uses a bankbook to inventory stormwater. Any stormwater in excess of the estimated processed stormwater is inventoried. Stormwater allocations are calculated using the actual processed stormwater developed in the attached table.

**Definitions:**

Dry Weather Season - The months of June to September exclusive of a one-week period following any rainstorm.

Estimated Dry Weather Process Wastewater Flow - The average effluent flowrate during the previous dry weather season.

Stormwater Runoff - The product of the inches of rainfall and the runoff factor.

Estimated Processed Stormwater - The difference between the actual effluent flowrate and the ballast water plus dry weather flowrate.

Stormwater Bankbook - Calculated inventoried stormwater.

Actual Process Stormwater - If the stormwater bankbook is not zero, the actual processed stormwater equals the estimated flow. If the bankbook is zero, the actual processed stormwater is equal to the stormwater runoff for that day plus the bankbook for the previous day.

## STORMWATER/BALLAST WATER ALLOCATION PROCEDURE

| | (A) Rainfall (in.) | (B) Stormwater Runoff (MGal/D) | (C) Effluent Flow (MGal/D) | (D) Dry Weather Effluent Flow (MGal/D) | (E) Estimated Processed Stormwater (MGal/D) | (F) Stormwater Bankbook (MGal) | (G) Actual Processed Stormwater (MGal/D) | (H) Ballast Water (MGal/D) |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | Previous Month's Bankbook= | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| . | | | | | | | | |
| . | | | | | | | | |
| . | | | | | | | | |
| 30 | | | | | | | | |
| TOTAL | | | | | | | | |
| AVERAGE | | | | | | | | |
| MAXIMUM | | | | | | | | |

Column (B) = Column (A) X Runoff Factor

Column (E) = Column (C) - Column (D) - Column (H).

Column (F): Column (F) = Column (F)(Previous Day) + Column (B) - Column (E).
Column (F) = 0 if Column (F) <0.

Column (G): If Column (F) >0, then Column (G) = Column (E).
If Column (F) = 0, then Column (G) = Column (B) + Column (F) previous day.

| DATE | MAXIMUM DAILY LIMITS | | | | | | |
|---|---|---|---|---|---|---|---|
| | BOD (KG/D) | TSS (KG/D) | (KG/D) | O&G (KG/D) | PHENOL (KG/D) | TOTAL CHROME (KG/D) | HEX. CHROME (KG/D) |
| | | | | | | | |

Maximum Daily Limit = Effluent Limit A.1. (Daily Max in kg/day) + Stormwater Allocation (Daily Max)

Stormwater Allocation = Effluent Limit A.2. (Daily Max in mg/l) x Daily Processed Stormwater (in mgd) x 3.785 l/gal

| Date | Rainfall (Inches) | Storm Runoff Flow (Inches x Runoff Factor) = Gallons | Ballast Flow in gallons |
|---|---|---|---|
| 1-2 | | | |
| 2-3 | | | |
| 3-4 | | | |
| 4-5 | | | |
| 5-6 | | | |
| 6-7 | | | |
| 7-8 | | | |
| 8-9 | | | |
| 9-10 | | | |
| 10-11 | | | |
| 11-12 | | | |
| 12-13 | | | |
| 13-14 | | | |
| 14-15 | | | |
| 15-16 | | | |
| 16-17 | | | |
| 17-18 | | | |
| 18-19 | | | |
| 19-20 | | | |
| 20-21 | | | |
| 21-22 | | | |
| 22-23 | | | |
| 23-24 | | | |
| 24-25 | | | |
| 25-26 | | | |
| 26-27 | | | |
| 27-28 | | | |
| 28-29 | | | |
| 29-30 | | | |
| 30-31 | | | |
| 31-1 | | | |
| Total | | | |
| Monthly Average | | | |

MONTH:

YEAR:

| | Monthly Average Storm Runoff+Ballast Water Flow (expressed in thousand Gals/day) | Allocation Factor x (kg /1000 Gals.) = (kg /day) | A.1. + Effluent Limits = Total Effluent Limit (kg /day) (Kg/day) |
|---|---|---|---|
| 30-Day Average Limitation (Kg/day) | $BOD_5$ | x 0.098 = | + = |
| | TSS | x 0.079 = | + = |
| | TOC | x 0.22 = | + = |
| | COD | x 0.68 = | + = |
| | O&G | x 0.03 = | + = |
| | PHENOL | x 0.00064 = | + = |
| | TOTAL CHROME | x 0.00079 = | + = |
| | HEX CHROME | x 0.00011 = | + = |

## Pretreatment of Industrial Wastewaters

a. The permittee shall be responsible for the performance of all pretreatment requirements contained in 40 CFR Part 403 and shall be subject to enforcement actions, penalties, fines and appropriate parties as provided in the Clean Water Act, as amended (33 USC 1351 et seq.) (hereinafter "Act"). The permittee shall implement and enforce its Approved POTW Pretreatment Program. The permittee's Approved POTW Pretreatment Program is hereby made an enforceable condition of this permit. EPA and the State may initiate enforcement action against an industrial user for noncompliance with applicable standards and requirements as provided in the Act.

b. The permittee shall enforce the requirements promulgated under sections 307(b), 307(c), 307(d) and 402(b) of the Act. The permittee shall cause industrial users subject to Federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.

c. The permittee shall perform the pretreatment functions as required in 40 CFR Part 403 including, but not limited to:

   (1) Implement the necessary legal authorities as provided in 40 CFR 403.8(f)(1);

   (2) Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;

   (3) Implement the programmatic functions as provided in 40 CFR 403.8(f)(2); and

   (4) Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3).

d. The permittee shall submit annually a report to EPA Region 9 and the State describing the permittee's pretreatment activities over the previous twelve months. In the event that the permittee is not in compliance with any conditions or requirements of this permit, then the permittee shall also include the reasons for non-compliance and state how and when the permittee shall comply with such conditions and requirements. This annual report is due on January 30th of each year and shall contain, but not be limited to, the information specified in the attached appendix B entitiled "Requirements for Pretreatment Annual Report".

e. The permittee shall submit a quarterly report to EPA Region 9 and the State describing the compliance status of each industrial user as described in Appendix B(4).

## REQUIREMENTS FOR PRETREATMENT ANNUAL REPORT

(1) A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the POTW's influent and effluent for those pollutants EPA has identified under section 307(a) of the Act which are known or suspected to be discharged by industrial users. The permittee is not required to sample and analyze for asbestos until EPA promulgates an applicable analytical technique under 40 CFR Part 136. Sludge shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent sampling and analysis except as note in (C) below. The sludge analyzed shall be a composite sample of the sludge for final disposal consisting of:

A. Sludge lagoons - 20 grab samples collected at representative equi-distant intervals (grid pattern) and composited as a single sample, or

B. Dried stockpile - 20 grab samples collected at various representative locations and depths and composited as a single sample,

C. Dewatered sludge - daily composite of 4 representative grab samples each day for 5 days taken at equal intervals during the daily operating shift taken from 1) the dewatering units or 2) from each truckload, and shall be combined into a single 5-day composite.

Wastewater and sludge sampling and analyis shall be performed a minimum of twice annually at 6-month intervals (once during wet weather and once during dry weather) and shall commence with the 1985 wet weather sampling period.

The permittee shall also provide any influent, effluent or sludge monitoring data for nonpriority pollutants which the permittee believes may be causing or contributing to Interference, Pass Through or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto. The results of samplings and analyses shall be reported to the Regional Board in the self-monitoring reports within a month of completion of analyses as well as in the annual report.

(2) A discussion of Upset, Interference, or Pass Through incidents, if any, at the POTW treatment plant which the permittee knows or suspects were caused by industrial users of the POTW system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the industrial user(s) responsible. The discussion shall also include a review of the applicable pollutant limitations to determine whether any additional limitation, or changes to existing requirements, may be necessary to prevent Pass Through, Interference or noncompliance with sludge disposal requirements.

(3) The cumulative number of industrial users that the permittee has notified regarding Baseline Monitoring Reports and the cumulative number of industrial user responses.

(4) An updated list of the permittee's industrial users including their names and addresses, or a list of deletions and additions keyed to a previously submitted list. The permittee shall provide a brief explanation for each deletion. The list shall indentify the industrial users subject to Federal Categorical Standards by specifying which set(sets) of standards are applicable. The list shall indicate which categorical industries, or specific pollutants from each industry, are subject to local limitations that are more stringent than the Federal Categorical Standards. The permittee shall also list the noncategorical industrial users that are subject only to local discharge limitations. The permittee shall characterize the compliance status of each industrial user by employing the following descriptions:

(A) In compliance with Baseline Monitoring Report requirements (where applicable);

(B) Consistently achieving compliance;

(C) Inconsistently achieving compliance;

(D) Significantly violated applicable pretreatment requirements as defined by 40 CFR 403.8(f)(2)(vii);

(E) On a compliance schedule to achieve compliance (include the date final compliance is required);

(F) Not achieving compliance and not on a compliance schedule;

(G) The permittee does not know the industrial user's compliance status.

A report describing the compliance status with Federal Categorical Standards of any industrial user characterized by the descriptions in items 4(C) through (G) above shall be submitted quarterly from the annual report date to EPA Region 9 and the State. The report shall identify the specific compliance status with Federal Categorical Standards of each such industrial user. This quarterly reporting requirement shall commence upon issuance of this permit.

(5) A summary of the inspection and sampling activities conducted by the permittee during the past year to gather information and data regarding industrial users. The summary shall include:

(A) The names and addresses of the industrial users subject to surveillance by the permittee and an explanation of whether they were inspected, sampled, or both and the frequency of these activities at each user; and

(B) The conclusions or results from the inspection or sampling of each industrial user.

(6) A summary of the compliance and enforcement activities during the past year. The summary shall include the names and addresses of the industrial users affected by the following actions:

(A) Warning letters or notices of violations regarding the industrial users' apparent noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user identify whether the apparent violation concerned the Federal Categorical Standards of local discharge limitations;

(B) Administrative Orders regarding the industrial users' noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user identify whether the violation concerned the Federal Categorical Standards or local discharge limitations;

(C) Civil actions regarding the industrial users' noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user identify whether the violation concerned the Federal Categorical Standards or local discharge limitations;

(D) Criminal actions regarding the industrial users' noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user identify whether the violation concerned the Federal Categorical Standards or local discharge limitations;

(E) Assessment of monetary penalties. For each industrial user identify the amount of the penalties;

(F) Restriction of flow to the POTW; or

(G) Disconnection from discharge to the POTW.

(7) A description of any significant changes in operating the pretreatment program which differ from the information in the permittee's Approved POTW Pretreatment Program including, but not limited to changes concerning: the program's administrative structure; local industrial discharge limitations; monitoring program or monitoring frequencies; legal authority or enforcement policy; funding mechanisms; resource requirements; or staffing levels.

(8) A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.

(9) A summary of public participation activities to involve and inform the public.

(10) A description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report.

Duplicate signed copies of these reports shall be submitted to the Regional Administrator and the State at the following addresses:

Water Management Division
U.S. Environmental Protection Agency
Region 9 Attn: W-3
215 Fremont Street
San Francisco, CA 94105

Executive Officer
Regional Water Quality Control Board
Room 6040
1111 Jackson Street
Oakland, CA 94607